

Astragalus douglasii; 101U, *Lupinus succulentus*; 103U, *Krameria grayi*; 115L, *Bursera microphylla*; 135M, *Ferocactus acanthodes*; 135L, *Ferocactus peninsulæ*; 143L, *Opuntia basilaris*; 145U, *Lemaireocereus thurberi*; 149U, *Arctostaphylos pungens*; 149M, *Limonium perezii* (not the native species but a Canary Island plant grown and sometimes escaping in southern California); 153L, *Eriodictyon lanatum*; 157L, *Datura wrightii*; 159U, *Lycium* sp., not *L. californicum*; 161U, *Castilleja affinis*; 175M, *Amauria rotundifolia*; 175L, *Helianthus gracilentus*.

The text is inaccurate in many details. For example, elevations for various northern plants, evidently taken from California floras, are not correct for Baja California—where the same plants commonly occur higher. Thus in Baja California the Sugar Pine seldom straggles below 1800m (6000 ft) and certainly never down to 600m (2000 ft.). Also the book needs more editing and is marred by more than the usual number of typhogarpicxl errors, especially in plant names.

This is the first of a projected series of nature guides from a publishing company established for the purpose. It sets a good standard for quality of color illustrations and general appearance of the book. However, there should be more emphasis on quality of text.—REID MORAN, Natural History Museum, San Diego, California 92112.

The grasses of Texas. By FRANK W. GOULD. 653 pp. + viii, 330 figs. Texas A & M University Press, College Station, Texas. 1975. \$20.00.

The very richness of the Texas grass flora alone makes the appearance of Frank Gould's latest book of major importance to students of the family. About two-thirds of the genera and over one-third of all the grass species known from the conterminous United States occur in Texas. Although the dust jacket states that the book is intended for the botanist and the rancher with little specialized training, Dr. Gould has presented us with a complete and taxonomically rigorous treatment that is probably too advanced to appeal to the casually interested rancher or naturalist.

Introductory material on the structure of the grass plant and spikelet terminology is well done and adequately illustrated. These discussions, along with those of the vegetation areas of Texas, are taken primarily from earlier works of the author. The generic key is innovative in its use of some new characters and in its departure from the traditional format that employs preliminary stops at the subfamily and tribe levels. It is a welcome change. However, the key is sometimes awkward because of a mixture of generic names, lettered groups, and numbered groups that must be properly traced.

The system of subfamilies and tribes used by Gould is one that is gaining general acceptance. Perhaps only the names Pooideae and Poeae might be unfamiliar to many of us who have only watched the once widely accepted scheme of George Bentham undergo major revisions. Gould's elevation of *Dichantherium* and his acceptance of *Hemarthria* and *Coelorachis* mark a further adjustment in the generic names of U. S. grasses.

Descriptions of the taxa are well done. The information is complete and the use of bold-face type for scientific names and italics for subheadings makes for easy reading. While Gould generally follows recent or standard monographic treatments, his decision to recognize only about one-third of the *Dichantherium* entities listed for Texas by Hitchcock and Chase is a most admirable exception. The systematic or agronomic commentary that accompanies many of the descriptions is both interesting and useful. Distribution of a species within the state is given in terms of the vegetation regions; general distribution is also cited.

The illustrations, particularly those of Valloo Kapadia, add much to the appearance and utility of the book. Most of the drawings, however, are taken from previously published works of the author and from other sources. Because of stylistic differences, the variation in the drawings is sometimes mildly distracting.

Texas now has a first-rate grass flora, certainly more modern and probably better than that of any other state. Students of agrostology have an important new reference.—JAMES PAYNE SMITH, JR., Department of Biology, Humboldt State University, Arcata, California 95521.